## Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

## Listing of Claims:

Claims 1-14. (Cancelled)

15. (Previously presented) A method of person tagging in an image processing system, the method comprising the steps of:

processing a sequence of images to generate a statistical model for each person to be tagged, the statistical model incorporating at least one appearance feature and at least one geometric feature of the tagged person;

applying the model to at least one subsequent image in order to perform at least one of a detection operation, a location operation and a tracking operation for the tagged person; and

controlling an action of the image processing system based on a result of the at least one operation;

wherein the statistical model generated for a given person $\Omega$ and image I comprises a likelihood probability function

$$P(I \mid T, \xi, \Omega) = \sum_{pix \in I} P(pix \mid T, \xi, \Omega),$$

where $r$ is an index to regions of similar appearance and $N$ is a total number of such regions, $r = 1, 2, \ldots N$, and

$$P(pix \mid T, \xi, \Omega) = \max_{r = 1,\ldots,N} (P(pix \mid r, T, \xi, \Omega)\ P(r \mid \xi, \Omega)),$$

where $P(pix \mid r, T, \xi, \Omega)$ is the probability of observing pixel $pix$ assuming that it belongs to an $r$-th region of the model on a pose $\xi$, and $P(r \mid \xi, \Omega)$ is the prior probability of the region at that pose.

16. (Original) The method of claim 15 wherein the regions of similar appearance include a dummy region having a constant probability as follows:

$$P(pix \mid r_{occlusion}, T, \xi, \Omega)\ P(r_{occlusion} \mid \xi, \Omega) = P_{occlusion}.$$

17. (Previously presented) The method of claim 15 wherein each of at least a subset of the pixels of the image I is characterized by a two-dimensional position vector x and by an appearance feature vector f such that:

$$P(pix \mid r, T, \xi, \Omega) = P(x \mid r, T, \xi, \Omega)\ P(f \mid r, T, \xi, \Omega),$$

Where P (x | $r$, T, $\xi$, $\Omega$) and P (f | $r$, T, $\xi$, $\Omega$) are approximated as Gaussian distributions over corresponding feature spaces.

Claims 18-21. (Cancelled)